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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,182	07/03/2003	Yorito Ota	10873.1246US01	4937
7:	590 01/07/2005		EXAMINER	
Merchant & Gould . P.O. Box 2903 Minneapolis, MN 55402-0903			CHANG, JOSEPH	
			ART UNIT	PAPER NUMBER
,			2817	
			DATE MAILED: 01/07/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summan.	10/613,182	OTA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Joseph Chang	2817				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
	action is non-final.	non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-15</u> is/are pending in the application.						
	4a) Of the above claim(s) <u>4-15</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1</u> is/are rejected.	6)⊠ Claim(s) <u>1</u> is/are rejected.					
7)⊠ Claim(s) <u>2 and 3</u> is/are objected to.	7) Claim(s) <u>2 and 3</u> is/are objected to.					
8) Claim(s) <u>1-15</u> are subject to restriction and/or e	election requirement.					
Application Papers						
9)⊠ The specification is objected to by the Examine	r.	•				
10)⊠ The drawing(s) filed on <u>03 July 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119		•				
a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)	_					
Notice of References Cited (PTO-892)   Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
Paper No(s)/Mail Date <u>10/6/03</u> .		atent Application (PTO-152)				

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## **DETAILED ACTION**

### Election/Restrictions

Applicant's election without traverse of Claims 1-3 drawn to species 1 in the reply filed on 11/15/04 is acknowledged.

Claims 4-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/15/04.

## Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: BIPOLAR TRANSISTOR FOR VOLTAGE CONTROLLED OSCILLATOR USING A CAPACITANCE ADJUSTMENT LINE.

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Sugiyama et al. US 2004/0041201 A1.

Sugiyama et al. discloses in figures 1-17 (see Para. [0069]) a bipolar transistor (Fig.1) comprising: a semiconductor substrate (Fig 5); a transistor operation region (21,22, 24, 25) formed on the semiconductor substrate; an insulating film (26) formed so as to cover a substrate of the semiconductor substrate; a lead line (28) led to a surface of the insulating film there through from the transistor operation region (24, 25); a pad (gate pad 34 in figure 9B) for wire bonding connected to the lead line (71 in Fig 15); and a capacitance adjustment line (gate electrode layer 38) connected to the pad (34, see Para. [0109]).

## Allowable Subject Matter

Claims 2 and 3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the best prior art of record, Sugiyama et al, taken alone or in combination of other references, does not teach or fairly suggest a collector electrode is formed on a reverse surface of the collector substrate (Claims 2 and 3).

### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Haruki discloses a semiconductor device with a capacitance adjustment section.

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Nemoto et al. discloses semiconductor device a capacitance adjustment

Wise et al. discloses semiconductor device a capacitance adjustment in a X-Y

matrix of capacitor.

Abiko et al. discloses a diode with a capacitance adjustment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Chang whose telephone number is 571 272-1759. The examiner can normally be reached on Mon-Fri 0700-1730.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph Chang Patent Examiner Art Unit 2817